**Child- and Environmental Risk Factors (Wave 1)**

***Teacher-rated Conduct Problems:*** Teachers rated ten items that were closely based on *DSM-IV* criteria for CD and oppositional defiant disorder (ODD). Items were scored using a 5-point response scale (*1 = Never to 5 = Very often*). These ten items were: Has teased others; Has been in conflicts with adults; Has violated important rules at preschool/school/home; Has threatened someone; Has hit, scratched, pushed, kicked or thrown something at others without apparent reason; Has hit, scratched, pushed, kicked or thrown something at others when provoked or stressed; Has taken others’ belongings without permission; Has broken or destroyed something on purpose; Has been very angry; and Has interrupted/disrupted other's games and activities. This tool has been used in various publications (e.g., Colins et al., 2014; Colins et al., 2024; Frogner et al., 2018). We computed the mean score of the ten items for each wave. Teachers also rated these 10 items at waves 2 to 5, these scores were used in the trajectory analyses.

***Parent-rated Conduct Problems:*** Parents rated the aforesaid ten items that were closely based on *DSM-IV* criteria for CD and oppositional defiant disorder (ODD). We computed the mean score of the ten items.

***Teacher-rated Fearlessness:*** This construct was assessed using the Child Fearlessness Scale (CFS; Colins et al., 2014) which includes six teacher rated items. Examples of items are: “He/she does not seem to be afraid of anything”, “He/she does not seem to be afraid when someone is trying to frighten him/her”, and “He/she never seems to get scared when someone is angry with him/her.” The response scale is: *1 = Does not apply, 2 = Applies poorly, 3 = Applies somewhat, 4 =* *Applies very well*. The items were framed to comprise the behavior of the child during the last six months. The mean of the six items was calculated to gain the Fearlessness variable used in the present study, in line with prior work (e.g., Colins et al., 2014; Klingzell et al 2016)

***Teacher-rated Grandiose-deceitful (GD), Callous-unemotional (CU), and Impulsivity-Need for stimulation (INS) traits:*** These traits were assessed using the teacher version of the Child Problematic Traits Inventory (CPTI; Colins et al., 2014). The CPTI is a 28-item questionnaire that aims to assess psychopathic personality traits in children aged 3–12 years. Eight items intend to measure the interpersonal psychopathy dimension (labeled GD; e.g., “He/she thinks that he/she is better than everyone else at almost everything”), ten items intend to measure the affective psychopathy dimension (labeled CU; e.g., “Never seems to feel bad for things he/she has done”), and ten items intend to measure the behavioral psychopathy dimension (labeled INS; eg, “Takes things very quickly and eagerly for themself”). The rater is instructed to assess each item based on how the child usually and typically behaves rather than based on how he or she behaves at the moment, using the following response scale: *1 = Does not apply; 2 = Applies poorly; 3 = Applies somewhat; and 4 = Applies very well*. The proposed 3-factor structure, reliability, and validity of the CPTI total and dimension scores has been confirmed in different ages samples and countries.3-8 We computed the mean score of the items within their respective dimension.

***Teacher-rated Attention-Deficit/Hyperactivity Disorder (ADHD) symptoms:*** This construct was assessed by teachers using 18 items aimed to assess the diagnostic criteria of AD/HD of the DSM-IV-TR (APA 2000) using DuPaul’s AD/HD scale (DuPaul et al., 1998). Examples of items are: “Runs about or climbs excessively in situations in which it is inappropriate” and “Fails to give close attention to details or makes careless mistakes.” The response scale is: *1=Never, 2=Rarely, 3=Sometimes, 4=Often, 5=Very Often.* The items were framed to comprise the behavior of the child during the last 6 months. The mean of the 18 items was calculated to gain the AD/HD symptoms variable used in the present study.

***Parent-rated Ethnicity and SES*:** Parents’ origin was assessed via one question to the parents, asking whether they were born in Sweden or not. Parents’ SES was assessed via questions to the parents about their level of education and about their yearly The SES variable used in the present study was computed by first computing the mean of the two parents’ educational level and then the mean of their yearly salary. Then these two means were z-transformed and a mean of these two z-scored means was computed to be the SES variable.

***Parent-rated Large Family and Non-intact Family:*** Parents rated a question about family composition (i.e., “Which adults mainly lives with the child?) and the number of (step) siblings of the child” (i.e., “How many siblings (including step siblings) does the child have?”). Children were considered to live in a non-intact family if both biological parents of the child no longer lived together (0 = intact; 1 = non-intact family) and in a large family if they had ≥ 3 (step) siblings (0 = ≤ 2 siblings; 1 = ≥ 3 siblings).

***Parent-rated Depressed Feelings:*** Parents rated one question, “Have you had periods in your life when you have been very sad and depressed for several weeks in a row?” using a 3-point response scale (*1* ***=*** *No, never; 2* ***=*** *Yes, occasionally; 3* ***=*** *Yes, repeatedly*). This variable was dichotomized, by recoding rating 3 (*Yes, repeatedly*) to be indicative of parental depression (0 = no; 1 = yes).

***Parent-rated Harsh and Warm Parenting:*** Parent-reported items assessing harsh and warm parenting were developed for the needs of the SOFIA study, and were used in prior work (e.g., Colins et al., 2021). The measure included seven items related to negative parenting strategies such as yelling, name-calling, and ver­bal and physical aggression. Examples items are: “You call your child names, such as “mean” or “stupid” when he/she has done something wrong” and “You hit your child when he/she has done something wrong”. Parents also rated seven items that tap warm parenting, relating to positive parenting strategies such as engaging in activities with the child, prais­ing the child, and expressing their love for the child. Exam­ple items are: “You show with words and gestures that you like the child” and “You laugh with your child”. All items were rated on a Likert scale ranging from 1 (*Never*) to 5 (*Very often*). To create the scales, we calculated the mean for the respective seven items to index harsh parent­ing and warm, respectively, in line with prior work (e.g., Colins et al., 2021; Fanti et al., 2023)

**Developmental Outcomes (Wave 6)**

***Teacher-rated DSM-oriented Conduct, Affective, and Anxiety Problems Symptoms:*** These symptoms were assessed through items from the corresponding DSM-oriented Conduct Problems scales of the Teacher Report form (TRF; (Achenbach et al., 2001). DSM-oriented Conduct Problems scale were assessed by means of 13 (TRF) items (e.g., “Cruel to animals”; “Cruelty, bullying, or meanness to others”; “Physically attacks people”; “Sets fire”), the Affective Problems scale by means of eight items (e.g., “He/she is unhappy, sad, or depressed”; “He/she is underactive, slow moving, or lacks energy”; and “There is very little they enjoy”. Items 18 and 91 were not administered); and the Anxiety Problems scale by means of six items (e.g., “He/she is nervous, high strung, or tense”, “He/she is too fearful or anxious”; and “He/she worries”). TRF items are scored on a 3-point response scale (*0 = Not true (as far as I know), 1 = Somewhat or sometimes true, 2 = Very true or often true*). The mean scores for each scale were calculated.

***Teacher-rated Limited Prosocial Emotions (LPE):*** Teachers were asked to rate four items that correspond with the DSM-5 LPE specifier symptoms, using a 4-point response scale (*1 = Does not apply; 2 = Applies poorly; 3 = Applies somewhat; 4 = Applies very well*). These four items are “Does not care about how he/she performs (e.g., not motivated or worried about performing well in school”; “Demonstrates emotional coldness/deficiencies in empathic ability”; “Demonstrates deficiencies in feelings of remorse”; and “Shows superficial or inadequate feelings (e.g., feelings shown are superficial or not sincere).” This scale has been used and validated in prior work (Colins et al., 2021). In line with most work on the LPE specifier (for a review see: Colins et al., 2020), we recoded these four items into present (i.e., Applies somewhat to Applies very well) or absent (i.e., Does not apply to Applies poorly). Children for whom two or more criteria were present were considered to meet criteria for the LPE specifier.

***Teacher-rated Low Prosocial Behavior:*** Teachers rated four items that tap prosocial behavior of the child (“Answers politely when he/she is addressed”; “Helping out at school in different ways”; “To say thank you clearly and politely (e.g., at meals)”; “Saying hello and goodbye”, using a 4-point response scale (*1 = Does not apply; 2 = Applies poorly; 3 = Applies somewhat; 4 = Applies very well*). These items were rescored to identify children with low levels of prosocial behavior. Specifically, scores of 2 to 4 were recoded into 0, indicating that a score of 1 was used as an index of low prosocial behavior. The four recoded items were then summed, which imply that scores ranged from 0 to 4, with a higher score being indicative of lower prosocial behavior.

***Teacher-rated Poor Academic Performance:*** Teachers also rated four items about the participants’ academic performance in mathematics, in Swedish, in Swedish as a second language, and in sports and health, using a 3-point response scale (*1 = Insufficient knowledge; 2 = Acceptable knowledge; and 3 = More than acceptable knowledge)*. These four items were rescored into the index Poor academic performance (scores 2 and 3 = 0; score 1 = 1) and summed to index overall poor academic performance (range 0-4). Finally, this summed score was dichotomized to identify children with low academic performance (Yes = 1 or higher; No= 0)

***Child Self-reported DSM-oriented Affective, and Anxiety Problems Symptoms:***These symptoms were assessed through items from the corresponding DSM-oriented scales of the Youth Self-Report (YSR; (Achenbach et al., 2001).These two scales comprise 12 items (affective problems, e.g., “I cry a lot”) and six items (e.g., “I worry a lot”), respectively. YSR items are scored on a 3-point response scale (*0 = Not true (as far as I know), 1 = Somewhat or sometimes true, and 2 = Very true or often true)*. We computed the mean score of the items within each scale.

***Child Self-reported Bullying****:* Children rated two items from the Olweus Bully/Victim Questionnaire (Olweus, 1996) Each item starts with a short definition of bullying (item 1) and cyberbullying (item 2). Then for each item a follow up question was asked, being, “How often have you been (cyber) bullied during the last six months: *1 = Never, 2 = 1-2 times, 3 = 2-3 times a month, "4 = Once a week, and 5 = Several times a week*. Youth who bullied others "2 or 3 times a month" or more often classified as bullies. Because only two items were used no internal consistency index was calculated.

***Child Self-reported Delinquent Behavior:*** Children rated how many times in the past six months they were involved in six different forms of violence (e.g., “Hit someone so he/she needed medical care”; and “Intentionally injuring someone with a weapon (e.g., a knife)?) and theft (e.g., “Stolen something in a store”; “Broke into a home or other building”; and “Snatched a bag or similar from someone you do not know”), using a 5-likert point scale: 1 = *No, that has not happened*, 2 = *One time*, 3 = 2*-3 times*, 4 = *4*-*10 times*, and 5 = *More than 10 times* (Andershed et al., 2002) Each item was recoded (0 = *Never*; 1 to 5 = *At least one time*) and the 17 recoded items were summed to create the continuous index ‘delinquent behavior’.

***Child Self-reported Alcohol Intoxication (Being Drunk)****:* Children answered one item (“Last year, have you consumed enough alcohol to become really drunk?”), using a 5-point response scale: 1 = *Never*; 2 = *Yes, one time*; 3 = *Yes, 2-3 times*; 4 = *Yes 4-10 times*; and 5 = *Yes, more than 10 times*). This item was rescored to index drunkenness (0 = never; 1 = one time or more).

***Child Self-reported Rule Breaking at School:*** This was measured through two questions (i.e., “I often break rules at school” and “I often receive reprimands at school because I have broken the rules”) that were scored using a 4-point response scale (1 = *Does not apply*; 2 = *Applies poorly*; 3 = *Applies somewhat*; 4 = *Applies very well*). Each item was rescored where a score of 3 or 4 was considered to be indicative of rule breaking (0 = no rule breaking, 1 = rule breaking). These two rescored items were summed (range: 0-2) and this sum score was dichotomized into 0 = no rule breaking at school and 1 = rule breaking at school.

***Child Self-reported) Delinquent Friends:*** Children scored five items (0 = no, 1 = yes) tapping whether their friends have (i) stolen something from a store, (ii) destroyed something on purpose, (iii) broke in somewhere, (iv) beaten someone down, and (v) been caught by the police. The mean score of these five items was then calculated.

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